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UNITED STATES DEPARTMENT OF AGRICULTURE  
BUREAU OF PUBLIC ROADS  
DIVISION OF AGRICULTURAL ENGINEERING

S. H. McCrory, Chief

MONTHLY NEWS LETTER

WASHINGTON, APRIL 21, 1930

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: ATTENTION OF ALL FIELD EMPLOYEES IS CALLED TO THE FACT :  
: THAT AN INFORMAL AGREEMENT OR CONTRACT MUST BE MADE FOR ALL :  
: SERVICES AND SUPPLIES WHICH ARE TO BE FURNISHED IN LARGE :  
: QUANTITIES OR OVER A PERIOD OF TIME. THUS, AGREEMENTS SHOULD :  
: BE MADE FOR TELEPHONE SERVICE, ROOM RENT, ELECTRICITY, GAS, :  
: OIL, GREASE, ETC. THERE MUST ALSO BE AN AGREEMENT FOR GARAGE :  
: RENT IN ACCORDANCE WITH THE MEMORANDUM ON THIS SUBJECT DATED :  
: <sup>Dec. 28</sup> MARCH 20, 1930, A COPY OF WHICH HAS BEEN SENT TO YOU. THESE :  
: AGREEMENTS, COVERING THE FISCAL YEAR 1931, ARE NOT DUE UNTIL :  
: JULY 1, 1930, AND IT IS NOT DESIRABLE TO EXECUTE THEM TOO :  
: EARLY, DUE TO POSSIBLE FLUCTUATIONS OF PRICES; BUT THE MATTER :  
: IS BROUGHT TO YOUR ATTENTION AT THIS TIME SO THAT YOU WILL :  
: HAVE AMPLE TIME TO CONSIDER THE MATTER AND HAVE ALL AGREEMENTS :  
: IN THE WASHINGTON OFFICE BY JULY 1. WHEN MAKING THESE AGREE- :  
: MENTS PLEASE MAKE ENOUGH COPIES SO AS TO BE ABLE TO SUBMIT :  
: THEM IN TRIPLICATE. :  
: .....

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: THE FOLLOWING ARE THE QUARTERLY REQUISITION NUMBERS FOR :  
: THE FOURTH QUARTER OF THE FISCAL YEAR 1930: GASOLINE, OIL AND :  
: GREASE, A.E. 308; REPAIR AND UPKEEP TO MOTOR VEHICLES AND :  
: TRACTORS, INCLUDING GARAGE RENT, A.E. 309; REPAIR OF ENGI- :  
: NEERING EQUIPMENT AND OFFICE EQUIPMENT, A.E. 310; MISCEL- :  
: LANEOUS FIELD ENGINEERING EQUIPMENT AND SUPPLIES, A.E. 311. :  
: THE APPROPRIATE NUMBER SHOULD BE PLACED ON EACH VOUCHER :  
: SUBMITTED. :  
: .....

THE ADVISORY COMMITTEE OF THE COLLEGE SECTION, AMERICAN SOCIETY OF AGRICULTURAL ENGINEERS, MET IN WASHINGTON APRIL 14-16 IN CONFERENCE WITH THE CHIEF AND OTHER MEMBERS OF THE STAFF OF THE DIVISION OF AGRICULTURAL ENGINEERING., THE FIVE MEMBERS OF THIS COMMITTEE, ALL HEADS OF AGRICULTURAL ENGINEERING DEPARTMENTS IN STATE AGRICULTURAL COLLEGES, ARE: PROFESSORS E. R. JONES OF WISCONSIN; S. P. LYLE OF GEORGIA; F. C. FENTON OF KANSAS; H. W. RILEY OF NEW YORK; AND C. E. SEITZ OF VIRGINIA.





LINES OF COOPERATION WERE OUTLINED BY L.A. JONES AND M. C. BETTS WHEREBY THE RESULTS OF WORK BY ONE INSTITUTION WOULD BE MADE AVAILABLE TO ALL. MENTION WAS MADE OF THE BUILDING PLANS DEVELOPED BY THIS DIVISION WHICH ARE MADE AVAILABLE FOR DISTRIBUTION BY THE COLLEGES. IT WAS SUGGESTED THAT AN INDEX OF BULLETINS, PERIODICAL LITERATURE, AND OTHER PUBLICATIONS RELATING TO AGRICULTURAL ENGINEERING BE ESTABLISHED IN THE AGRICULTURAL ENGINEERING DEPARTMENT OF EACH COLLEGE, SIMILAR TO THAT DEVELOPED BY T.A.H. MILLER OF THIS OFFICE AND USED PARTICULARLY BY OUR FARM STRUCTURES SECTION IN CORRESPONDENCE. MEMBERS OF THE COMMITTEE STATED THAT SUCH AN INDEX WOULD BE OF GREAT SERVICE TO THE COLLEGES.

PLANS FOR AN EXTENSION WORKERS' CONFERENCE PREPARED BY L.A. JONES, TO BE HELD NEXT JUNE AT THE UNIVERSITY OF ILLINOIS, WERE APPROVED BY THE COMMITTEE. THE CONFERENCE WILL BE DEVOTED TO EXTENSION METHODS RATHER THAN TO SUBJECT MATTER. MR. JONES LATER ANNOUNCED THAT THE PLAN FOR THIS SCHOOL HAD BEEN APPROVED BY THE EXECUTIVE COMMITTEE OF STATE DIRECTORS OF EXTENSION IN THE LAND GRANT COLLEGES, AND BY THE DIRECTOR OF EXTENSION WORK OF THIS DEPARTMENT.

A REPORT CONCERNING PROGRESS MADE IN THE SURVEY OF RESEARCH IN FARM STRUCTURES WAS MADE BY HENRY GIESE. THIS REPORT DWELT UPON THE GREAT NEED OF COORDINATION OF THE INVESTIGATIONS BY THE DIFFERENT COLLEGES THUS AVOIDING UNNECESSARY DUPLICATION. THE PAST RESEARCH IN FARM STRUCTURES HAS EMPHASIZED THE TECHNIQUE OF THIS SUBJECT AND THE ECONOMIC RELATION OF FARM BUILDINGS TO PRODUCTION HAS BEEN OVERLOOKED. THE DESIRABILITY OF THIS DIVISION ACTING AS COORDINATOR WAS RECORDED IN A FORMAL MOTION.

CLAUDE K. SHEDD, RECENTLY APPOINTED AGRICULTURAL ENGINEER OF THE DIVISION ATTENDED THE AGRICULTURAL SHORT COURSE AT THE UNIVERSITY OF MISSOURI FROM APRIL 17 TO 19 AND DELIVERED ADDRESSES ON THE SUBJECT OF "THE FUTURE OF TERRACING IN THE STATE OF MISSOURI".

CHAS. A. BENNETT SPENT SEVERAL DAYS IN THE WASHINGTON OFFICE RECENTLY IN CONNECTION WITH HIS MANUSCRIPT ON COTTON DRYING AND HIS FUTURE WORK ON COTTON GINNING. HE STOPPED OFF AT BIRMINGHAM, ALA. ON HIS RETURN TO TALLULAH, LA. TO CONFER WITH MANUFACTURERS OF COTTON GINS REGARDING THE NEED OF FURTHER EXPERIMENTATION IN THE DRYING OF COTTON. MR. BENNETT WILL GO TO DALLAS, TEXAS, THE LATTER PART OF THIS MONTH TO MAKE A SERIES OF TESTS ON EXPERIMENTAL COTTON DRIERS.

N. A. KESSLER, ASSOCIATE LANDCLEARING SPECIALIST WITH HEADQUARTERS AT ST. PAUL, MINN. IS AT PRESENT AT STATE COLLEGE, PA. IN CONNECTION WITH LAND CLEARING INVESTIGATIONS IN THAT STATE.

GEO. M. WARREN IS PREPARING SPECIFICATIONS FOR WATER SUPPLY, WELL DRILLING AND SEWAGE DISPOSAL EQUIPMENT FOR FOUR OR FIVE SERVICE JOBS IN CALIFORNIA, MONTANA AND NEBRASKA AND FOR PLUMBING AT THE ARLINGTON EXPERIMENT FARM.

M. C. BETTS AND T.A.H. MILLER ARE PREPARING PLANS FOR A GREENHOUSE AT HOUMA, LA. FOR THE OFFICE OF SUGAR PLANT INVESTIGATIONS AND FOR THREE BUILDINGS FOR THE SAME OFFICE AT CANAL POINT, FLA. PLANS ARE ALSO BEING PREPARED FOR A GREENHOUSE AND HEAD HOUSE AT ARLINGTON EXPERIMENT FARM.





MR. BETTS IN PREPARING ILLUSTRATIONS FOR A BULLETIN ON RAT PROOFING TO BE PUBLISHED IN COOPERATION WITH THE BUREAU OF BIOLOGICAL SURVEY.

M.A.R. KELLEY HAS BEGUN THE PREPARATION OF A BULLETIN ON GRAIN STORAGE IN THE CORN BELT AREA. THIS WILL BE A COMPANION BULLETIN TO THE ONE ON "FARM BULK STORAGE OF SMALL GRAIN" WHICH WAS RECENTLY SUBMITTED FOR PUBLICATION.

W. W. McLAUGHLIN, H.F. BLANEY, A.A. YOUNG, AND C.A. TAYLOR REPRESENTED THE DIVISION AT A CONFERENCE HELD IN LOS ANGELES MARCH 27- 29, TO CONSIDER RESEARCH PROBLEMS IN CONSUMPTIVE USE OF WATER AND CONSERVATION OF RAINFALL. THIS CONFERENCE BROUGHT TOGETHER WORKERS IN THE DIFFERENT BUREAUS OF THE DEPARTMENT OF AGRICULTURE AS WELL AS OTHER DEPARTMENTS OF THE FEDERAL GOVERNMENT, STATE AGENCIES, AND OTHER INSTITUTIONS SUCH AS THE CARNEGIE INSTITUTE. THERE WAS ALSO REPRESENTED THE ENGINEERING PROFESSION, THE WATER USERS, AND THE AGRICULTURISTS. THE FIRST TWO DAYS FORMAL PAPERS WERE PRESENTED, EACH PAPER BEING FOLLOWED BY DISCUSSION AND QUESTIONS. IT WAS DECIDED TO MAKE AN ANNUAL EVENT OF THIS MEETING, AND A COMMITTEE WAS APPOINTED FOR THE PURPOSE OF PERMANENT ORGANIZATION. THERE WAS ALSO A COMMITTEE APPOINTED, ON WHICH MR. McLAUGHLIN AND PROFESSOR FRANK ADAMS WERE NAMED, TO CONSIDER RESEARCH PROBLEMS.

J. G. MARR HAS BEEN PLACED ON A HALF SALARY BASIS AND WILL DEVOTE ONE-HALF OF HIS TIME TO TEACHING AT THE UNIVERSITY OF IDAHO IN THE DEPARTMENT OF AGRICULTURAL ENGINEERING, FOR THE REMAINDER OF THE PRESENT SCHOOL YEAR. HE WILL TEACH IRRIGATION AND DRAINAGE SUBJECTS.

THE MANUSCRIPT FOR A BULLETIN OF THE NEW MEXICO AGRICULTURAL EXPERIMENT STATION ON "GROUND WATER OF THE MIDDLE RIO GRANDE VALLEY AND ITS RELATION TO IRRIGATION", BY D. W. BLOODGOOD WAS SUBMITTED TO WASHINGTON FOR APPROVAL.

O. V. P. STOUT COMPLETED THE ANNUAL INSTALLMENT OF HIS FIVE-YEAR REPORT ON SACRAMENTO-SAN JOAQUIN DELTA WORK, CALIFORNIA.

M. R. LEWIS SUBMITTED A REPORT ON THE PROPOSED IMPROVEMENT OF THE ST. DAVID IRRIGATION SYSTEM, COCHISE COUNTY, ARIZ., BASED ON AN INSPECTION OF THE PROJECT IN FEBRUARY.

MANUSCRIPT BY CARL ROHWER FOR A TECHNICAL BULLETIN OF THE DEPARTMENT ON EVAPORATION FROM FREE WATER SURFACES, HAS BEEN SUBMITTED TO WASHINGTON. THE DATA PRESENTED ARE BASED ON STUDIES BEGUN BY THE COLORADO AGRICULTURAL EXPERIMENT STATION MORE THAN 40 YEARS AGO AND LATER CARRIED ON UNDER CO-OPERATIVE AGREEMENT BETWEEN THAT INSTITUTION AND THIS DIVISION UNDER THE DIRECTION OF MESSRS. PARSHALL AND ROHWER. THE OBJECT OF THE STUDY WAS THE DETERMINATION OF THE FACTORS THAT CAUSE EVAPORATION, THE DERIVATION OF THE GENERAL LAW LINKING THESE FACTORS WITH THE EVAPORATION, AND THE EVALUATION OF THE RELATION BETWEEN THE EVAPORATION FROM VARIOUS TYPES OF STANDARD EVAPORATION TANKS AND FROM A LARGER WATER SURFACE.

A. T. MITCHELSON PREPARED AN ARTICLE ON "SPREADING OF WATER OVER ABSORPTIVE AREAS FOR STORAGE UNDERGROUND", WHICH WAS PUBLISHED IN THE CALIFORNIA CITROGRAPH FOR APRIL. THE ARTICLE DISCUSSES THE FEASIBILITY OF CONSERVING WATER BY THIS METHOD WHERE GEOLOGICAL FORMATION AND OTHER CONDITIONS ARE FAVORABLE. MR. MITCHELSON IS AT PRESENT SUPERVISING A PROJECT FOR STORING WATER FROM THE SAN GABRIEL RIVER, CALIF. OVER GRAVELLY AREAS AT THE FOOT OF THE SAN BERNARDINO MOUNTAINS. RESIDENTS OF THAT DISTRICT ARE TAKING A KEEN INTEREST IN THE EXPERIMENTS, WHICH ARE PROVING SUCCESSFUL







IN RAISING THE GROUND WATER LEVEL IN DOMESTIC AND TEST WELLS AT CONSIDERABLE DISTANCES FROM THE POINT WHERE THE WATER IS SUNK. A MORE DETAILED DESCRIPTION OF THIS WORK WILL BE GIVEN IN A LATER NUMBER OF THE NEWS LETTER.

W. M. HURST SPENT MARCH 19 IN TOLEDO IN CONNECTION WITH DRIERS MADE BY THE RANDOLPH COMPANY OF THAT CITY. INCIDENTALLY HE VIEWED THE CORN BORER CONTROL MACHINERY UNDER CONSTRUCTION AT THE CORN BORER CONTROL HEADQUARTERS.

STANLEY MCBIRNEY, ASSISTANT AGRICULTURAL ENGINEER, AFTER ABOUT A YEAR'S ABSENCE, REPORTED FOR DUTY AT TOLEDO APRIL 1.

AUBREY L. SHARPE, JUNIOR AGRICULTURAL ENGINEER, REPORTED FOR DUTY AT TOLEDO, APRIL 1.

WALLACE ASHBY SPENT THE WEEK OF APRIL 7 TO 12 AT STATE COLLEGE, PA. ASSISTING IN THE CORN BORER COOPERATIVE PROJECT ON PLOWING.

R. B. GRAY SPENT APRIL 2 AND 3 AT EVANSVILLE, IND., AT A PLOWING DEMONSTRATION WHERE THE PULVIATOR PLOW WAS PULLED BEHIND EACH OF 17 TRACTORS OF VARIOUS MAKES.

IN COMPANY WITH OFFICIALS OF THE PLANT QUARANTINE CONTROL ADMINISTRATION AND BUREAU OF ENTOMOLOGY MR. GRAY MADE A THREE DAY AUTO TRIP ALONG THE OHIO RIVER AND ITS TRIBUTARIES OBSERVING CONDITIONS AFFECTING THE SPREAD OF THE CORN BORER IN FLOATING CORNSTALKS AND DEBRIS. MR. GRAY SPENT APRIL 14 TO 17 IN WASHINGTON ATTENDING THE CONFERENCE OF THE COLLEGE SECTION AND CONFERRING ON MATTERS RELATING TO FARM MACHINERY AND CORN BORER CONTROL.

ON APRIL 4 AND 5 MOTION PICTURES WERE TAKEN NEAR TOLEDO OF AGRICULTURAL MACHINERY USED IN THE SPRING. THIS COMPLETES THE FILM STARTED LAST FALL SHOWING MACHINERY EMPLOYED IN CONTROLLING THE CORN BORER.

O. E. RAMSER MADE A DETAILED INSPECTION OF A NUMBER OF TERRACED FARMS OWNED BY THE PIONEER MORTGAGE COMPANY OF OKLAHOMA CITY, OKLA. AND OF THE TRAVELERS INSURANCE COMPANY OF HARTFORD, CONN. THE FORMER COMPANY OWNS ABOUT THIRTY FARMS IN THE VICINITY OF DURANT AND THE LATTER ABOUT SEVENTY FARMS IN THE VICINITY OF McALESTER. THEY WERE BOTH INTERESTED IN RECEIVING INFORMATION AS TO THE ADVISABILITY OF TERRACING FARMS FROM AN ECONOMIC STANDPOINT AND WHETHER THEIR TERRACING WORK IS BEING DONE SATISFACTORILY AND IN ACCORDANCE WITH THE BEST KNOWN PRACTICES.

H.S. RIESBOL WAS APPOINTED TO THE POSITION OF JUNIOR CIVIL ENGINEER EFFECTIVE APRIL 7 AND REPORTED FOR DUTY AT GUTHRIE, OKLA. WHERE HE WILL BE EMPLOYED ON THE SOIL EROSION EXPERIMENTAL FARM NEAR GUTHRIE.

THE EXPERIMENTAL WORK ON THE OKLAHOMA STATE FARMS IS BEING DONE UNDER THE DIRECTION OF O. E. RAMSER, SENIOR DRAINAGE ENGINEER UNDER A CO-OPERATIVE AGREEMENT WITH THE OKLAHOMA A. & M. COLLEGE. THREE FARMS HAVE THUS FAR BEEN ESTABLISHED. PROFESSOR N. E. WINTERS WHO IS IN CHARGE OF THESE FARMS FOR THE STATE STATES THAT THEIR AIM IS TO ESTABLISH ULTIMATELY ABOUT TEN OF THESE FARMS LOCATED UNDER DIFFERENT CLIMATIC TOPOGRAPHIC AND SOIL CONDITIONS.

H.E. BERGSCHNEIDER, AGRICULTURAL ENGINEER, HAS BEEN EMPLOYED BY THE OKLAHOMA A. & M. COLLEGE TO TAKE CHARGE OF THE ENGINEERING PHASES OF SOIL EROSION WORK TO BE CONDUCTED AT THESE FARMS. HE REPORTED FOR DUTY ON MARCH 17.

